

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 04250140 A

(43) Date of publication of application: 07.09.1992

(51) Int. Cl. A61B 5/14
G01N 21/31

(21) Application number: 03089245
(22) Date of filing: 29.03.1991
(30) Priority: 02.09.1982 US 82 414176
(62) Division of application: 58161784

(71) Applicant: NELLCOR INC
(72) Inventor: NEW JR WILLIAM
CORENMAN JAMES E

(54) OXYGEN CONCENTRATION METER

(57) Abstract:

PURPOSE: To provide an oxygen concentration meter eliminating necessity of repeatedly correcting each probe manually.

CONSTITUTION: A probe 1 has LEDs 10, 20, a photo-electric effect sensor 30 and a coded resistor 40. The probe 1 is free to remove, and it is connected to an oxygen concentration meter 60 through a connector 52. Voltage generated on the resistor 40 by an electric current I of an electric current source 69 reaches a CPU 61 through a multiplexor 66 and a comparator 65. The CPU computes a value of the resistor 40 built in the probe 1 and finds wavelength of each of the LEDs from combination of a resistance value stored is an ROM 62 and wavelength of the LEDs 10, 20. When the wavelength is found, the CPU automatically carries out repeated correction of a optical comparison circuit. The CPU actuates each of the LEDs through a control circuit 67, and a detected electric current by the sensor

30 reaches an amplification and filter circuit 68 and the multiplexor 66. The CPU 61 decides oxygen saturated quantity, etc., with the comparator 65 and a DAC 70 and displays it on a display 64.

COPYRIGHT: (C)1992,JPO

